Acquisition Reform Success Story



F-22 Air Superiority Fighter

Program Manager (PM): Brig Gen (Sel) Michael

Mushala

Program Executive Officer: Maj Gen Robert Raggio

Contractor: Lockheed Martin Aeronautical Systems

Pratt & Whitney Aircraft Co.

Contractor PM: Mr. Tom Burbage (LMAS)

Mr. Walt Bylciw (P&W)

Program Description

The F-22 will be the world's pre-eminent air superiority fighter for the 21st century featuring low-observable stealth characteristics, supersonic cruise without afterburner, advanced integrated avionics, thrust vectoring, and significantly reduced operations and support costs.

How Streamlining Makes a Difference

The F-22 Program from its inception recognized the need for acquisition reform and new vistas in forming their Engineering and Manufacturing Development (EMD) program. Their vision was simple--do what makes sense. The team--program office, maintainers, warfighters and contractors--led the way in implementing Lean Enterprise and CAID (Clear Accountability in Design) initiatives. In preparing to contract for pre-production verification vehicles, the F-22 team has implemented lessons learned from EMD to improve and streamline the acquisition process.

Measure	From	To
Contract Data Requirements List	262	20
Military Specifications and Standards (air vehicle/engine)	204/152	31/17
System Program Officer Manpower (FY95 vs. FY00)	350	191
Statement of Work pages	146	~20
Government controlled specification (air vehicle/engine.)	450/25	15/3
Number of statistically capable key processes(EMD vs. full	<10%	100%
production)		
Cycle time in months without vs. with Lean Enterprise)(air	40/30	24/12
vehicle/eng.)		

Bottom Line: The F-22 is aggressively implementing acquisition reform to have 100% of key processes statistically capable, i.e., zero scrap and rework (doing it **better**), to drastically reduce cycle times (doing it **faster**), and to reduce costs by eliminating most CDRLs and government controlled specifications at Physical Configuration Audit (doing it **cheaper**).